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STATE OF MONTANA
PLEASE
DIVISION OF FORENSIC SCIENCE
DEPARTMENT OF JUSTICE
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SHELVED WITH PERIODICALS

OCTOBER 1982

STATE DOCUMENTS COLLECTION
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DEATH INVESTIGATION TRAINING

October 2-4	Dallas, Texas (Auto Crash Investigation)
October 4-8	St. Louis, Missouri (Coroner's Training Course)
November 29 - December 3	Bozeman MLEA
December 5-11	Coeur D' Alene Idaho Law Enforcement Academy
May 9-20, 1983	Modesto, California (Coroner's Training Course)

ATTENTION - ASSOCIATE MEDICAL EXAMINERS

Many physicians are still requesting autopsy permission from the family on coroner's cases and even on violent deaths. When a family refuses permission and the coroner orders an autopsy it compromises both the doctor and the coroner. Please ask your medical staff to refrain from asking for autopsy permission when the death may fall within a coroner's jurisdiction.

RAPE KITS

Sexual assault evidence boxes are expensive but reusable. There are nearly 400 out there somewhere. Please return any in your evidence lockers if the case has been adjudicated, and please notify us when a kit you have sent to the lab is no longer needed as evidence. Thank you.

OCTOBER 1982

ON CALL SCHEDULE - MONTANA STATE MEDICAL EXAMINER

275 W. Front Street
Missoula, Montana 59802

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
					1	2 RON RIVERS
3 RON RIVERS	4	5	6	7	8	9 JOHN PHAFF
10 JOHN PHAFF	11	12	13	14	15	16 RON RIVERS
17 RON RIVERS	18	19	20	21	22	23 JOHN PHAFF
24 JOHN PFAFF KEN MUELLER 31	25	26	27	28	29	30 KEN MUELLER

Telephone Numbers: State Office - 728-4970
WATS Line - 243-5796

Home Phone: Dr. Ron Rivers- 728-2033 (Home)
(week nights call unless otherwise indicated)

Dr. John Pfaff - Great Falls
Hospital - 727-3333
Home - 727-3905

Dr. Ken Mueller- Billings
Hospital - 657-7000
Home - 248-3024

OCTOBER 1982
STRANGULATION
R. L. Rivers, M.D.

As the sheriff helped to open the body bag he said, "Doc, we left the electrical cord around her neck just like we found it. The victim was found in bed with a pillow over her face."

While he photographed the neck the pathologist noted the absence of any marks from the cord. "Strange, there are plenty of bruises and scratches on the front and back of the neck but no horizontal groove below the adams apple like we usually see in ligature strangulation."

Looking into the young girl's blue eyes with a magnifying glass, the pathologist exclaimed, "Aha!, here is a sign of asphyxia." Next he examined the backs of the hands and lower arms. "The fingernails are intact but there are some skin fragments underneath." Someone stated, "Well then, the suspect will have scratches on him." "Not necessarily", the doctor stated.

Later, after dissecting the neck the doctor felt that she had been manually strangled. But the hyoid bone in the neck wasn't broken as it usually is.

QUESTIONS TO BE CONSIDERED:

1) Why is it important that the ligature accompanies the body?

2) What did the pathologist see in her eyes?

3) Where else could the skin fragments come from?

4) Why wasn't the hyoid bone broken?

5) How did the pathologist eliminate suffocation by the pillow or hanging?

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ANSWERS:

1. When the ligature accompanies the body the medical examiner can often detect a matching imprint or groove in the neck and certify that this indeed was the instrument of death. This should be photographed (rope and imprint individually and together) and documented as one would with any pattern injury and suspected weapon.

2. Pinpoint bleeding or petechiae are often seen on the whites of the eyes and inside or on the eyelids of victims of asphyxia. They can be caused by rupture of tiny blood vessels from the pressure caused by blood getting into the head but not draining due to compression on the jugular veins. Another theory are actual leaks in the blood vessels caused by chemicals released in the body when the brain is deprived of oxygen. However petechiae are often not found in asphyxia and can be seen in victims of heart attacks. So they are not proof of anything but just an aid in making an opinion.

3. Often a victim may claw at the ligature or hands to relieve the pressure. Crescent shaped scratches on the neck may be from the victim or the assailant's fingernails.

4. If the hyoid bone is broken the case is manual strangulation until proven otherwise. Fractures of the bone do not occur in typical hangings or ligature strangulations. However, it may not break in young people where most of the bone is still cartilage and very elastic.

5. Hanging usually leaves an inclined or slanted furrow on the neck rising to a suspension point behind the ear or neck. Suffocation by a pillow may leave contusions or lacerations on the insides of the lips. Cloth fibers may be seen in the injuries about the mouth. In the absence of grooves on the neck and presence of bruises and fingernail scratches one should suspect manual strangulation. Inside the neck there is usually bleeding into the muscles.

p.s. Don't forget to take the fingernail scrapings and always examine the female victim of strangulation for evidence of rape.